

Why PVC Is The Wrong Choice For Your Support Surface

Choose Dartex® Polyurethane

The cost of treating preventative pressure ulcers is a global concern. In the UK, the NHS alone spends between £1.8-£2.5 billion every year¹ and in the USA this rises sharply to up to \$11.6 billion². Polyurethane-coated fabrics can go a long way to helping reduce pressure ulcer occurrence.

WHY PVC UNDERPERFORMS:

In the healthcare sector, flexible PVC can often be found as a material for mattress bases, wheelchair seating and chair covers.

Whilst cheap to mass produce, the properties of PVC do not make it best suited for specific medical applications. PVC is not breathable resulting in increased moisture build up. Flexible PVCs can contain endocrine disrupting chemicals which are known to be damaging to health and the environment.

1. Bennett G, Dealey C, Posnett J. The costs of pressure ulcers in the UK. *Age and Ageing*. 2004; 33: 230-35.

2. <https://www.ahrq.gov/professionals/systems/hospital/pressureulcer toolkit/putool1.html> accessed Feb 2019

WHY POLYURETHANE IS BETTER:

Polyurethane (PU) is a class of polymers which provide useful qualities for skin contact products, such as:

- Abrasion Resistance
- Breathability
- Durability
- Stretch
- Water resistance

These qualities make it an ideal choice for medical support surfaces, such as mattress covers and seating.

[Healthierhospitals.org/hhi-challenges/safer-chemicals/list-furniture-and-materials-meet-hh-healthy-interiors-goal](https://www.healthierhospitals.org/hhi-challenges/safer-chemicals/list-furniture-and-materials-meet-hh-healthy-interiors-goal)

The Healthier Hospitals program challenges healthcare organizations to address the health and environmental impacts of their sector. To comply with the 'Healthy Interiors' challenge:

 **Healthier Hospitals** Ensure that 30 percent of the annual volume of furnishings and furniture purchases (based on cost) eliminate the use of formaldehyde, perfluorinated compounds, polyvinyl chloride (PVC), antimicrobials, and all flame retardants.¹

A PRACTICE GREENHEALTH PROGRAM

Dartex® fabrics conform to these requirements. Speak to us to find out more.



Choose The Right Fabric For Your Support Surface

How Does Dartex® Polyurethane Compare To PVC?

| | ✔ POLYURETHANE (PU) | ✘ PVC |
|-------------------------------------|---|--|
| <p>MVP</p> | <p>High moisture vapour permeability (MVP) ensures that the moisture vapour from the body passes through the surface and away from the patient with ease and does not build up against the skin.</p> | <p>Non-breathable PVC allows moisture to build up on the skin's surface with no means of escape. This can lead to moisture lesions developing and increase skin breakdown.</p> <p>Moisture damage can occur inside the mattress when PVC is used as a base fabric, as moisture vapour from the patient passes through the mattress and cannot escape through the PVC causing 'pooling' effect.</p> |
| <p>Low friction</p> | <p>Low friction surfaces like PU are ideal for areas of the body that are likely to experience skin rubbing against the surface to help prevent skin shear.</p> | <p>High friction surfaces like some PVCs can contribute to shear on the skin's surface, leaving the patient susceptible to pressure ulcers developing.</p> |
| <p>STRETCH High High stretch</p> | <p>High stretch properties in PU ensure maximum envelopment and allow the benefit of the technology beneath the surface to be fully realised.</p> | <p>Low to no stretch PVC is more limited in its flexibility making it unsuitable for applications where the patient is moved often.</p> |
| <p>Advanced chemical resistance</p> | <p>Durable when used as a mattress base, and breathable to allow moisture to escape; keeping the mattress in full working order for longer.</p> | <p>Chemical degradation such as rigorous cleaning with sodium hypochlorite will crack the structure of the PVC polymers and result in the fabric failing over time exposing threads and becoming an infection control risk.</p> |
| <p>Waterproof</p> | | |



Choose PU fabric for your support surface. Choose Dartex.

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